Serial Number: 09/416,098

Reply to Office Action dated 21 February 2007

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REMARKS

This case has been carefully reviewed and analyzed in view of the Office Action dated 21 February 2007. In that Office Action, the Examiner objected to the Drawings under 37 C.F.R. § 1.83(a) for not showing the means for performing a correlation as recited in Claim 4. In connection with at least the embodiment shown in Fig. 2, however, the Specification indicates such "correlation" at page 8, lines 16-20 to be carried out "between the received and the detected data," within the carrier frequency control block 206 shown. The Specification goes on to explain with reference to Fig. 2 that further "offset information can be determined ... by continuous comparison of the received signal and detected signal in block 206," (page 9, lines 15-18). It is respectfully submitted, therefore, that at least Fig. 2 of the Drawings does in fact show the recitations of Claim 4.

Also in the Office Action, the Examiner rejected Claims 1, 4-5, 8-9, 15, 18-19, 22-23, 29, 31, and 34-35 under 35 U.S.C. § 112, first paragraph, for containing subject matter not adequately described in the Specification. The Examiner more specifically stated that the original Disclosure discloses the digital correction of carrier frequency offsets and the digital correction of sampling frequency offsets to be employed only in separate and mutually exclusive embodiments. The Examiner rejected the pending Claims also under 35 U.S.C. § 112, second paragraph, on the same basis.

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Reconsideration is respectfully requested, however, since the Specification and Drawings as originally filed do in fact disclose the combined use of corrections for both types of frequency offsets - namely, carrier frequency offsets and sampling frequency offsets. While the Specification, in the interests of clarity and brevity, describes these corrections in turn, it nowhere specifies these corrections to be mutually exclusive, nor precludes the combined use of such in the same embodiment, where necessary. Indeed, the Specification explicitly recognizes that in general "two sources of frequency offsets: carrier frequency offsets and sampling frequency offsets" must be accounted for to eliminate the effects of frequency offsets adequately in a digital communication system (page 1, lines 16-17, emphasis added).

The Specification goes on to explicate with reference to Fig. 1 that the "carrier and sampling frequency offsets introduced by various remote units" there shown must be "appropriately corrected during transmission" to guard against diminished communication (page 7, lines 10-12, emphasis added). It notes unambiguously that "each remote unit 100" shown in the embodiment of Fig. 1 in fact "corrects the frequency offsets during transmission," (page 7, lines14-15, emphasis added).

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Elsewhere, having described each of the frequency offset correction schemes in turn, the Specification repeats that in appropriate embodiments, "the transmitter can adjust its carrier frequency <u>and</u>/or sampling frequency accordingly for next transmission," (page 18, lines 17-19, <u>emphasis added</u>). Even the Abstract of the Disclosure leaves no question that the disclosed method and system are implemented "so that the signal received by the original transmitter is in sampling <u>and</u> carrier frequency lock with the original transmitter's local frequency reference," (<u>emphasis</u> added).

It is respectfully submitted, therefore, that the Specification does support the correction of both the carrier frequency and sampling frequency offsets during digital communication. The Specification quite explicitly contemplates as much, though for the sake of simple clarity and brevity, it may break much of the detailed discussion down by the type of frequency offset corrected. Accordingly, withdrawal of the rejections set forth under both the first and second paragraphs of 35 U.S.C. § 112 is respectfully requested.

It is believed that the subject Patent Application is now in condition for allowance, and such action is respectfully requested.

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No fees are believed to be due with this Response. If there are any charges associated with this filing, the Honorable Commissioner for Patents is hereby authorized to charge Deposit Account #18-2011 for such charges.

Respectfully submitted,

For: ROSENBERG, KLEIN & LEE

Jun Y. Lee

Registration #40,262

Dated: 5/24/2007

Suite 101 3458 Ellicott Center Drive Ellicott City, MD 21043 (410) 465-6678 Customer No. 04586

CERTIFICATE OF FACSIMILE TRANSMISSION

I hereby certify that this paper is being facsimile transmitted to the U.S. Patent and Trademark Office, Art Unit #2611, facsimile number 571-273-8300 on the date shown below.

5/21/2007

Jun Y Lee